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Thomas P Pavelko
Stevens Davis Miller & Mosher
Suite 850
1615 L Street NW
Washington, DC 20036

EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT

PAPER NUMBER

1772

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DATE MAILED: 08/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,185

Applicant(s)

PROPST JR, CHARLES W.

Examiner

Christopher P Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed August 23, 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

1. The disclosure is objected to because of the following informalities: the particles of zinc oxide, polyethylene wax emulsion, and the structure of the packaging is not discussed within the description of the invention. An antecedent basis needs to be provided for items claimed in the claims section, in order to clarify and define the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "self-sustaining film" is vague and indefinite. The definition of film is a thin skin or membrane; therefore it cannot be considered a film unless attached to a substrate.

Regarding claim 10, the phrase "combinations thereof" is vague and indefinite. The word comprises already includes combinations of the materials listed, therefore the phrase "combinations thereof" is not needed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Felter et al (USPN 4,895,886).

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Felter anticipates the instant invention with a surface dissipative film that comprises an acrylic resin base that is a methacrylate containing polymer (see abstract), about 1 to about 10wt% quaternary ammonium compound (see col. 1, lines 34-40), and a dispersion of zinc oxide particles (see col. 2, lines 63-65).

4. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Shaw (USPN 4,379,822).

Shaw anticipates the instant invention with a laminate (see col. 6, lines 19-33) comprising two or more laminae coated on at least one surface of a laminae with a conductive polymeric composition (see col. 2, lines 34-37) comprising an acrylic resin base (see col. 2, lines 54-60) and a quaternary ammonium compound (see col. 2, lines 39-41) in an amount of about 2-25wt% (see col. 7, lines 24-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Felter in view of Shaw (USPN 4,379,822).

Felter teaches a dissipative film comprising a composition including an acrylic resin base containing a quaternary ammonium compound in an amount of about 1 to about 10wt%. Felter does not comprise a polyethylene wax emulsion.

However, Shaw teaches that a polyethylene wax emulsion is added to an acrylic resin base containing quaternary ammonium compound to make the film water resistant or hydrophobic (see col. 2, lines 52-62). Therefore, one of ordinary skill in the art would have recognized that adding a polyethylene wax

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emulsion to an acrylic resin base would make the film water resistant or hydrophobic when coating any surface as taught by Shaw.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to use polyethylene wax emulsion in the film of Felter in order to make the film water resistant or hydrophobic as taught by Shaw.

6. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arudi (USPN 5,597,675) in view of Felter.

Arudi teaches a paper layer (see col. 4, lines 27-32) coated with a conductive polymeric composition comprising an acrylic resin base that is a methylmethacrylate-containing compound (see col. 4, lines 59-66) containing a quaternary ammonium compound. Arudi fails to teach that the quaternary ammonium compound is in an amount of about 1 to about 10wt% and that the acrylic resin base comprises a dispersion of zinc oxide particles.

However, Felter teaches that the quaternary ammonium compound is about 1 to about 10wt% for the composition to work most efficiently for electrical conductivity (see col. 3, lines 30-31), and a dispersion of zinc oxide particles is added to serve to stabilize the composition by preventing phase

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separation of antistatic agents (see col. 2, lines 63-65).

Therefore, one of ordinary skill in the art of film compositions would have recognized that for the composition to work most efficiently as an electrical conductor on the paper layer, the weight percent of quaternary ammonium compound is about 1 to about 10wt%, and that a dispersion of zinc oxide particles is added to stabilize the composition as taught by Felter.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the acrylic resin base of Arudi to comprise quaternary ammonium compound in an amount of about 1 to about 10wt% for the composition to work most efficiently and a dispersion of zinc oxide particles to stabilize the composition as taught by Felter.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arudi in view of Felter as applied to claim 5 above, and further in view of Shaw.

Arudi with Felter teach the paper layer and coating in claim 5, but the polymeric composition does not comprise a polyethylene wax emulsion.

However, Shaw teaches that a polyethylene wax emulsion can be added to an acrylic resin base containing quaternary ammonium compound in order to make the film water resistant or

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hydrophobic (see col. 2, lines 52-62). Therefore, one of ordinary skill in the art would have recognized that adding a polyethylene wax emulsion to the acrylic resin base would make the film water resistant or hydrophobic when constructing the paper layer or organic photoconductor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyethylene wax emulsion in Arudi in order to make the paper layer water resistant or hydrophobic as taught by Shaw.

8. Claims 10-13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamuro et al (USPN 4,846,345) in view of Felter.

Hamuro teaches a package for electronic component chips requiring an antistatic processing be performed on the package in order to prevent static electricity caused by friction between the electronic component chips themselves or between the electronic component chips and the case (see col. 6, lines 26-32). Hamuro also teaches that the package is prepared by thermoplastic resin, metal, paper or a combination of the above mentioned materials (see col. 6, lines 32-35). Hamuro fails to teach a specific antistatic process to be performed on the package.

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However, Felter teaches that a layer of a conductive polymeric composition comprising an acrylic resin base that is a methylmethacrylate containing polymer (see abstract), about 1 to about 10wt% quaternary ammonium compound (see col. 1, lines 34-40), and a dispersion of zinc oxide particles (see col. 2, lines 63-65) is applied to a substrate in order to provide the substrate with an antistatic property. Therefore, one of ordinary skill in the art would have recognized that adding a static dissipative film to a package would provide the antistatic process that Hamuro states is needed in order to prevent static electricity caused by friction between the electronic component chips themselves or between the electronic component chips and the case.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the film of Felter that is well known in the art, as described above, to provide Hamuro with an antistatic process as taught by Felter.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamuro in view of Felter as applied to claim 12 above, and further in view of Shaw.

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Hamuro with Felter teach the package and layer of conductive polymeric composition in claim 12, but the polymeric composition does not comprise a polyethylene wax emulsion.

However, Shaw teaches that a polyethylene wax emulsion can be added to an acrylic resin base containing quaternary ammonium compound to make the film water resistant or hydrophobic (see col. 2, lines 52-62). Therefore, one of ordinary skill in the art would have recognized that adding a polyethylene wax emulsion to the acrylic resin base would make the film water resistant or hydrophobic when constructing the package.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use polyethylene wax emulsion in Hamuro in order to make the package water resistant or hydrophobic as taught by Shaw.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Berbeco (USPN 4,662,514)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440.

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The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB
July 30, 2002


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

8/27/02